

WHAT IS CLAIMED

1. A wireless communication architecture comprising:

- a transceiver that is adapted to transmit on a first of a plurality of communication channels and to receive  
5 on a second of said plurality of communication channels, and having a transmission channel connector and a receiver channel connector supported in a prescribed spatial orientation by a radio transceiver support structure; and
- 10 a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel, and first and second transceiver-coupling port connectors supported in said prescribed spatial orientation by a diplexer support  
15 structure, and wherein, for a first orientation and insertion of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector  
20 of said radio transceiver, and the other of which is blind-engageable with said receiver channel port connector of said radio transceiver, and wherein, for a second orientation and insertion of said diplexer structure with respect to said transceiver support  
25 structure, said one of said first and second transceiver-coupling port connectors is blind-engageable with said receiver channel port connector of said radio

transceiver, and the other of said first and second  
transceiver-coupling port connectors is blind-engageable  
30 with said transmission channel port connector of said  
radio transceiver.

2. The wireless communication architecture  
according to claim 1, further comprising a diplexer guide  
structure configured to guide said diplexer, which has  
been placed in one of said first and second orientations,  
5 to an insertion location adjacent to said radio  
transceiver that brings said transmission channel and  
receiver channel connectors of said diplexer support  
structure into engagement with respective ones of said  
transceiver-coupling port connectors of said transceiver  
10 support structure.

3. A radio architecture comprising:

a radio transceiver that is adapted to transmit on  
a first of a plurality of communication channels and to  
receive on a second of said plurality of communication  
5 channels, and having a transmission channel connector and  
a receiver channel connector supported in a prescribed  
spatial orientation by a radio transceiver support  
structure; and

a diplexer having an antenna port adapted to be  
10 coupled to an antenna, and first and second transceiver-  
coupling, blind-mating connectors supported in said  
prescribed spatial orientation by a diplexer support

structure, and wherein, for a first orientation of said  
diplexer support structure with respect to said  
15 transceiver support structure, one of said first and  
second transceiver-coupling, blind-mating connectors  
engages said transmission channel port connector of said  
radio transceiver, and the other of which engages said  
receiver channel port connector of said radio  
20 transceiver, and wherein, for a second orientation of  
said diplexer structure with respect to said transceiver  
support structure, said one of said first and second  
transceiver-coupling, blind-mating connectors engages  
said receiver channel port connector of said radio  
25 transceiver, and the other of said first and second  
transceiver-coupling, blind-mating connectors engages  
said transmission channel port connector of said radio  
transceiver.

4. The radio architecture according to claim 3,  
further comprising a diplexer guide structure configured  
to guide said diplexer, which has been placed in one of  
said first and second orientations, to a location  
5 adjacent to said radio transceiver that brings said  
transmission channel and receiver channel connectors of  
said diplexer support structure into engagement with  
respective ones of said transceiver-coupling port  
connectors of said transceiver support structure.

5. For use with a wireless communication device having a transceiver adapted to transmit on a first of a plurality of communication channels and to receive on a second of said plurality of communication channels, and  
5 having a transmission channel port and a receiver channel port, and a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel, and first and second transceiver-coupling ports that are connectable with  
10 selected ones of said transmission and receive channel ports of said transceiver, a method of interfacing said first and second transceiver-coupling ports of said diplexer with said selected ones of said transmission and receive channel ports of said transceiver, said method  
15 comprising the steps of:

- (a) providing said transceiver with a transmission channel port connector and a receiver channel port connector that are supported in a prescribed spatial relationship by a transceiver support structure;
- 20 (b) providing said first and second transceiver-coupling ports of said diplexer with associated first and second RF connectors that are supported in said prescribed spatial relationship by a diplexer support structure, so that for a first orientation and insertion  
25 of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector

of said transceiver, and the other of which is blind-engageable with said receiver channel port connector of said transceiver, and wherein, for a second orientation and insertion of said diplexer structure with respect to said transceiver support structure, said one of said first and second transceiver-coupling port connectors is blind-engageable with said receiver channel port connector of said transceiver, and the other of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector of said transceiver;

(c) placing said diplexer support structure in one of said first and second orientations; and

(d) inserting said diplexer support structure into said transceiver support structure, and thereby causing said one of said first and second transceiver-coupling port connectors to blind-engage said transmission channel port connector of said transceiver, and the other of said first and second transceiver-coupling port connectors to blind-engage said receiver channel port connector of said transceiver.

6. The method according to claim 5, further comprising the steps of:

(e) changing the frequency plan of said transceiver by

removing said diplexer support structure

from said transceiver support structure,

placing said diplexer support structure in  
the other of said first and second orientations, and

reinserting said diplexer support  
10 structure into said transceiver support structure, and  
thereby causing said other of said first and second  
transceiver-coupling port connectors to blind-engage said  
transmission channel port connector of said transceiver,  
and said one of said first and second transceiver-  
15 coupling port connectors to blind-engage said receiver  
channel port connector of said transceiver.

7. The method according to claim 5, wherein step  
(d) comprises providing said wireless communication  
device with a diplexer guide structure that is configured  
to guide said diplexer, when placed in either of said  
5 first and second orientations, to an insertion location  
adjacent to said transceiver that brings said  
transmission channel and receiver channel port connectors  
of said diplexer support structure into engagement with  
respective ones of said transceiver-coupling port  
10 connectors of said transceiver support structure.